

IN THE SPECIFICATION:

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strikethrough~~.

In the Office Action dated September 23, 2005, the Examiner objected to the title of the invention as being non-descriptive. Please amend the title as indicated below.

Please REPLACE page 1, line 1, with the following:

IMAGE-CAPTURING DEVICE WITH POSITION DETECTOR FOR VIBRATION
REDUCTION.

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 9, and 18 and ADD new claims 19-33 in accordance with the following:

1. (CURRENTLY AMENDED) An image-capturing device comprising:
an image-capturing element that converts light to an electrical signal;
a photographic lens member that condenses subject light at the image-capturing element;
a board on which the image-capturing element is mounted;
a position detector having a first member mounted on the photographic lens member and a second member mounted on the board to detect a relative position of the photographic lens member and the board; and
an elastic member having one end thereof secured to the photographic lens member and another end thereof secured to the board.

2. (ORIGINAL) An image-capturing device according to claim 1, further comprising:
a drive device that moves the board and the photographic lens member relatively to each other along a direction substantially perpendicular to an optical axis of the photographic lens member.

3. (ORIGINAL) An image-capturing device according to claim 2, wherein:
the drive device moves the board and the photographic lens member relatively to each other along a direction substantially perpendicular to the optical axis of the photographic lens member by imparting an electromagnetic force.
4. (ORIGINAL) An image-capturing device according to claim 3, wherein:
the board is an electric circuit board; and
the elastic member achieves electrical conductivity and at least part of the drive device and the electric circuit board are electrically connected via the elastic member.
5. (ORIGINAL) An image-capturing device according to claim 4, wherein:
the drive device comprises an electromagnet that moves as part of the photographic lens member and a permanent magnet secured to the board.
6. (WITHDRAWN) An image-capturing device according to claim 4, wherein:
the drive device comprises an electromagnet that moves as part of the photographic lens member and an electromagnet secured to the board.
7. (WITHDRAWN) An image-capturing device according to claim 3, wherein:
the drive device comprises a permanent magnet that moves as part of the photographic lens member and an electromagnet secured to the board.
8. (ORIGINAL) An image-capturing device according to claim 3, further comprising:
a vibration detection sensor secured to the board, which outputs an electrical signal corresponding to an extent of vibration of the image-capturing device; and
a vibration-proofing control unit that implements drive control on the drive device in conformance to an output from the vibration detection sensor.
9. (CURRENTLY AMENDED) An image-capturing device according to claim 8, further comprising:
~~————a position detection sensor secured to a board, which outputs an electrical signal corresponding to a position representing relative movement of the board and the photographic lens member, wherein:~~
the vibration-proofing control unit implements drive control on the drive device in conformance to outputs from the vibration detection sensor and the position detection sensor.

10. (ORIGINAL) An image-capturing device according to claim 1, wherein:
the elastic member is formed in a narrow, elongated rod shape and achieves elasticity along a direction perpendicular to a longitudinal direction thereof.
11. (ORIGINAL) An image-capturing device according to claim 10, wherein:
the elastic member is a metal wire.
12. (ORIGINAL) An image-capturing device according to claim 1, wherein:
the photographic lens member includes a photographic lens portion and a holding portion for holding the photographic lens.
13. (ORIGINAL) An image-capturing device according to claim 12, wherein:
the photographic lens and the holding portion are formed as an integrated unit through resin molding.
14. (ORIGINAL) An image-capturing device according to claim 1, wherein:
the photographic lens member and the elastic member are formed as an integrated unit through resin molding.
15. (WITHDRAWN) An image-capturing device according to claim 2, wherein:
the photographic lens member is fixed relatively to a main body of the image-capturing device.
16. (WITHDRAWN) An image-capturing device according to claim 2, wherein:
the board is fixed relatively to a main body of the image-capturing device.
17. (ORIGINAL) An image-capturing device according to claim 1, wherein:
the elastic member regulates the distance between the image-capturing element and the photographic lens member.
18. (CURRENTLY AMENDED) An image-capturing device comprising:
an image-capturing element that converts light to an electrical signal;
a photographic lens member that includes a photographic lens portion and a holding portion for holding the photographic lens and condenses subject light at the image-capturing element;
a board on which the image-capturing element is mounted;
an elastic member having one end thereof secured to the photographic lens member and another end thereof secured to the board;

a drive device that moves the board and the photographic lens member relatively to each other along a direction substantially perpendicular to an optical axis of the photographic lens member;

a vibration detection sensor secured to the board, which outputs an electrical signal corresponding to an extent of vibration of the image-capturing device;

a position detection sensor, members of which are secured to a the board and the photographic lens member, and which outputs an electrical signal corresponding to a relative position representing relative movement of the board and the photographic lens member; and

a vibration-proofing control unit that implements drive control on the drive device in conformance to outputs from the vibration detection sensor and the position detection sensor.

19. (NEW) An image-capturing device according to claim 1, wherein:

the first member is a gradation chart and the second member is a photo-reflector.

20. (NEW) An image-capturing device according to claim 1, wherein:

the first member is a slit and a LED and the second member is a PSD.

21. (NEW) A camera comprising:

an image-capturing element that converts light to an electrical signal;

a photographic lens member that condenses subject light at the image-capturing element;

a board on which the image-capturing element is mounted;

a position detector having a first member mounted on the photographic lens member and a second member mounted on the board to detect a relative position of the photographic lens member and the board; and

an elastic member having one end thereof secured to the photographic lens member and another end thereof secured to the board.

22. (NEW) A camera according to claim 21, further comprising:

a drive device that moves the board and the photographic lens member relatively to each other along a direction substantially perpendicular to an optical axis of the photographic lens member.

23. (NEW) A camera according to claim 22, wherein:

the drive device moves the board and the photographic lens member relatively to each other along a direction substantially perpendicular to the optical axis of the photographic lens member by imparting an electromagnetic force.

24. (NEW) A camera according to claim 23, further comprising:
a vibration detection sensor secured to the board, which outputs an electrical signal corresponding to an extent of vibration of the image-capturing device; and
a vibration-proofing control unit that implements drive control on the drive device in conformance to an output from the vibration detection sensor.
25. (NEW) A camera according to claim 24, wherein:
the vibration-proofing control unit implements drive control on the drive device in conformance to outputs from the vibration detection sensor and the position detection sensor.
26. (NEW) A camera according to claim 21, wherein:
the first member is a gradation chart and the second member is a photo-reflector.
27. (NEW) A camera according to claim 21, wherein:
the first member is a slit and a LED and the second member is a PSD.
28. (NEW) An image-capturing method that condenses a subject light on an image-capturing element by a photographic lens member, comprising:
mounting the image-capturing element on a board;
securing the photographic lens member to an elastic member, one end of the elastic member being secured to the photographic lens member and another end of the elastic member being secured to the board; and
detecting a relative position of the photographic lens member and the board by a position detector, the position detector having a first member mounted on the photographic lens member and a second member mounted on the board.
29. (NEW) The method according to claim 28, wherein:
the first member is a gradation chart and the second member is a photo-reflector.
30. (NEW) The method according to claim 28, wherein:
the first member is a slit and a LED and the second member is a PSD.
31. (NEW) The method according to claim 28, wherein:
the elastic member is a metal wire.

32. (NEW) The method according to claim 28, further comprising:
moving the board and the photographic lens member relatively to each other along a direction substantially perpendicular to an optical axis of the photographic lens member.
33. (NEW) The method according to claim 32, wherein:
moving the board and the photographic lens member by imparting an electromagnetic force.